

REMARKS

Claim Amendments

Support for the amendment to claim 1 and the new claims can be found, for example, on page 7, line 1, and in the examples.

The Rejections Under 35 USC § 103

The claims were rejected as allegedly unpatentable over Fujiwara in view of Hiraiwa; over Hiraiwa in view of Fujiwara; and also over Hiraiwa in view of Fujiwara and Yamagata.

For the reasons already of record, applicants disagree with the rejections, e.g., that one of ordinary skill in the art would not be motivated to combine the teachings of the references as alleged. Nevertheless, to further the prosecution of the application, step d) of claim 1 is amended.

Of the three references used in the rejections only Fujiwara teaches a step corresponding to applicant's step d), which is admitted in the Office Action. Thus, no matter what combination of the references is considered, the allegations and teachings regarding step d) only come from Fujiwara.

Fujiwara teaches in example 2, on column 16, lines 5-18, that

The resultant soot body was supplied into a heating furnace and annealed at 1,050° C. in a mixed gas atmosphere of chlorine and helium and then annealed at 1,250° C. in a mixed gas atmosphere of silicon tetrafluoride and helium. This soot body was heated to 1,600° C. and consolidated, thereby obtaining silica glass having a diameter of 70 mm and length of 260 mm. The two ends of this silica glass were cut off to form silica glass having a diameter of 70 mm and length of 200 mm. This silica glass was subjected to isotactic pressing at 1,775° C. for 1 hr to increase the diameter 230 mm. The resultant silica glass was cut and polished, thereby obtaining a photomask substrate having a size of □:120 to 180 mm.times.t:1/4 inch (6.35 mm).


As can be seen from the above, Fujiwara teaches three distinct heating stages from the point where the soot body is formed until such is consolidated to form silica glass. The first heating stage is at 1,050° C. in a chlorine and helium atmosphere. The second heating stage is at 1,250° C. in a silicon tetrafluoride and helium atmosphere. The third heating stage is at 1,600° C. No gases are taught or suggested for the third heating stage. Thus, one of ordinary skill in the art would not be motivated to perform a step d) of the present claims at 1,500°C to 1,700°C in a fluorine compound gas-containing atmosphere as such is not taught or

suggested by the reference.

Reconsideration is respectfully requested.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,



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